

81
in the presence of the candidate compound than in its absence indicates that the candidate compound is capable of competing with the parathyroid hormone for binding to the receptor.

41. The method of claim 40, wherein the polypeptide comprises an amino acid sequence of any one of SEQ ID NOs:5-13 or a fragment of any one of SEQ ID NOs:5-13.

Sub
E
42. The method of claim 40, wherein the polypeptide comprises at least six amino acids and less than the complete amino acid sequence of a naturally occurring parathyroid hormone receptor.

43. The method of claim 40, wherein the polypeptide comprises at least six amino acids and less than the complete amino acid sequence of a naturally occurring human parathyroid hormone receptor.

44. A method for identifying a compound capable of competing with a parathyroid hormone-related protein for binding to a parathyroid hormone receptor, the method comprising contacting a polypeptide with a parathyroid hormone-related protein in the presence or in the absence of a candidate compound, wherein the polypeptide comprises at least six amino acids and less than the complete amino acid sequence of a parathyroid hormone receptor, the polypeptide capable of binding parathyroid hormone-related protein; and

comparing the level of binding of the polypeptide to the parathyroid hormone-related protein in the presence of the candidate compound with the level of binding of the polypeptide to the parathyroid hormone-related protein in the absence of the candidate compound, wherein a lower level of binding in the presence of the candidate compound than in its absence indicates that the candidate compound is capable of competing with the parathyroid hormone-related protein for binding to the receptor.

45. The method of claim 44, wherein the polypeptide comprises an amino acid sequence of any one of SEQ ID NOs:5-13 or a fragment of any one of SEQ ID NOs:5-13.

A₁
46. The method of claim 44, wherein the polypeptide comprises at least six amino acids and less than the complete amino acid sequence of a naturally occurring parathyroid hormone receptor.

47. The method of claim 44, wherein the polypeptide comprises at least six amino acids and less than the complete amino acid sequence of a naturally occurring human parathyroid hormone receptor.

48. A method for identifying a compound capable of competing with a parathyroid hormone for binding to a parathyroid hormone receptor, the method comprising combining a parathyroid hormone with a cell in the presence or in the absence of a candidate compound, wherein the cell (1) contains an isolated nucleic acid that encodes a polypeptide at least 75% identical the amino acid sequence of SEQ ID NO:20 and (2) expresses the polypeptide, and wherein the polypeptide is capable of binding parathyroid hormone; and comparing the level of binding of the receptor to the parathyroid hormone in the presence of the candidate compound with the level of binding of the receptor to the parathyroid hormone in the absence of the candidate compound, wherein a lower level of binding in the presence of the candidate compound than in its absence indicates that the candidate compound is capable of competing with the parathyroid hormone for binding to the receptor.

49. The method of claim 48, wherein the polypeptide comprises an amino acid sequence of any one of SEQ ID NOs:5-13 or a fragment of any one of SEQ ID NOs:5-13.

50. The method of claim 48, wherein the polypeptide comprises at least six amino acids and less than the complete amino acid sequence of a naturally occurring parathyroid hormone receptor.

51. The method of claim 48, wherein the polypeptide comprises at least six amino acids and less than the complete amino acid sequence of a naturally occurring human parathyroid hormone receptor.--